Survey of Other States

The project included interviewing a budget officer in three other states regarding their budgeting processes and systems. The states, selected by the SBO and LFB, were Arizona, Missouri and Montana.

	Arizona	Montana	Missouri
Budget Process			
Budgeting Cycle (annual, biennial, other)	Biennial (A)	Biennial	Annual (O)
Origin of Budget Bill (executive or legislature)	Legislature	Executive	Executive
Number of Appropriation Bills	One	One (H)	16 (P)
Budgeting Approach	Incremental	Incremental	Incremental
	(B)	<u>(I)</u>	
		9 A A A A A A A A A A A A A A A A A A A	
Information System(s)			
Budget System	BUDDIES	MBARS (J)	BRASS (Q)
Age of System	1.5 years (C)	1.5 years	6 months
Hardware Platform	LAN or	Client-	Client-
	Desktop	Server	Server
Software Platform	Access	Oracle 7.5	Oracle
Amount Budgeted for System	\$0 (D)	\$500,000	\$2.5 million
Actual Cost of System	\$0 (D)	\$600,000	\$2.5 million
Annual Maintenance Budget	\$0 (D)	\$300,000 (K)	(R)
Implementation Dates	June 1998	Jan – Sept 1998	July 1999
Integration with Other Systems	No (E)	Yes (L)	Yes (R)
Package or Custom System	Custom	Custom	Package (S)
System Developer	Internal	Legacy Solutions	AMS
Business Requirements Definition Process	No (F)	Yes (M)	Yes
Required or Optional	Optional (G)	Required (N)	Required
State Budget Office Web Sites	www.state.az .us/ospb/	www.oa.state .mo.us/bp/ind ex.shtml	www.state.mt .us/budget/in dex.htm

A – Arizona's current biennial budget (2000 - 01) is the first biennial budget. The state has been migrating from annual budgeting since 1993.

B – Arizona is moving from an incremental budgeting process to program budgeting.

C – Arizona's budget system, BUDDIES (Budget Development and Information Exchange System) was first developed in 1998 in Access. The state revised it in July 1999 and will release a new version in July 2000. BUDDIES may be downloaded from Arizona's budget office web site.

- D-No additional funds were budgeted for the system. It was developed in-house by staff in positions that were reallocated from budget analysis activities.
- E BUDDIES receives data from a legacy financial information system through a multi-step download procedure.
- F BUDDIES was developed to automate the budget forms used in the prior process.
- G The majority of agencies use BUDDIES. However, it is not required and several agencies use internal systems.
- H Montana's budget process includes one major appropriation bill and several smaller bills that address specific programs.
- I Montana budgets on an incremental basis using prior year actual expenditures as the budget base.
- J- MBARS Montana Budget and Accounting Reporting System
- K The annual maintenance budget for MBARS is \$300,000. Experience to date with the system indicates that this amount will not be required for annual maintenance.
- L Montana's budget system is integrated with the human resources and general ledger systems.
- M The development of the business requirements for Montana's budget system included representatives from agencies, the Executive, and the Legislature. The process included reviewing an RFP from Missouri and an earlier effort in Montana to develop a custom system.
- N-all participants in the budget process in Montana are required to use MBARS. This was true of the prior budget information system.
- O Missouri's operating budget is developed annually. The capital budget is developed biennially (even-numbered years).
- P The number of bills ranges from 16 (in odd-numbered years) to 19 bills (in even numbered years).
- Q BRASS Budget Reporting and Analysis Support System
- R The interviewee did not know the annual maintenance budget. A follow-up question was sent.
- S Missouri's budget system is currently integrated with the state's financial system and will be integrated with the future human resources and payroll systems.
- T Missouri's budget system is a module from AMS that was customized for the state.

Arizona

The budget process in Arizona starts in June of even-numbered years. The first stage is the development of agency budget requests based on instructions from the Office of Strategic Planning and Budgeting. Agencies develop budget requests based on the instructions and assigned limits on funding increases.

The agency budget requests that are prepared for the Executive Budget relate to new mandates, changes in demographics for existing programs, and reallocations within base budgets. The net impact of reallocations must be neutral. The Office of Strategic Planning and Budgeting prepares estimates related to personnel cost increases and inflationary increases for the agencies. These must be accommodated within the allowable increases of agencies. Agencies develop their requests in detail for submission in September to the Office of Strategic Planning and Budgeting. However, agency requests related to new activities are prepared at a high level using "Issue Sheets." These are brief (one – two page) summaries that outline new initiatives or activities.

The base for budget development is the prior year's appropriation authority. This information is included for agencies in the state's budget information system (BUDDIES). Agency budgets requests are due in September to the Office of Strategic Planning and Budgeting and to the Legislature.

The development of BUDDIES started in September 1997 for use in July 1998. The initial development was planned for use by about 70 of the state's smaller agencies. The system, developed in Access, was designed to automate the state's existing budget forms. It was developed internally using approximately two full time positions that were reallocated from the Office of Strategic Planning and Budgeting. The office made the decision to develop BUDDIES.

A revised version of BUDDIES is under development for the next biennial budget. This version will be available to all state agencies but will not be required. State agencies will be able to use existing systems or BUDDIES. Data standards are being developed to ensure that existing agency systems are able to electronically transfer information to BUDDIES. A number of the existing agency systems provide functionality not supported by BUDDIES, including operating budget support and budgeting at a greater level of detail than supported by BUDDIES.

Arizona's BUDDIES system is designed to support the collection of budget request information for the Office of Strategic Planning and Budgeting. It is used by state agencies during budget development. The Office of Strategic Planning and Budgeting uses a separate system, the Budget Development System, in the development of the Executive Budget. This system, built in Access, is a tool used to track budget recommendations and produce the Executive Budget Book. It is not used as an analysis tool.

BUDDIES and the Budget Development System are integrated to provide for the transfer of data from BUDDIES to the Budget Development System. BUDDIES is not integrated with other information systems. The state does download information from its legacy financial information system. The download is described as a complicated, multiple step process. Information from the state's human resources system is not available to BUDDIES or the Budget Development System.

Arizona developed BUDDIES after reviewing the existing systems and identifying a number of redundancies and rekeying of information. Staff in the Office of Strategic Planning and Budgeting were spending a significant amount of time rekeying agency request data and ensuring that agency calculations and roll-ups of data were correct. The main benefits cited for the system are elimination of rekeying of data, ensuring accuracy of agency requests and summaries, and preloading prior-year appropriation information for agency base budgets.

The Legislature in Arizona does not use BUDDIES during the budget process. It uses the previous Excel based system. Agency budget requests are sent to the Office of Strategic Planning and Budgeting and the Legislature in September. The Legislature receives paper-based requests and staff keys the information into the Legislative system. The Legislative staff is responsible for updating their system through the budget process as final appropriation levels are set. Following this, state staff rekeys the appropriation information into BUDDIES and into the state's legacy financial system.

Arizona has hired Gartner Group to assist in the development of an RFP for new human resource and payroll systems. This process is not expected to include the procurement of a budget module. The new systems will be designed to integrate with BUDDIES. Arizona staff have spoken with Oregon about that state's new system and noted the cost of such a system.

Missouri

Missouri's operating budget process starts in May each year. Guidelines are issued to state agencies by the Budget and Planning Office around July 10. The guidelines include policy instructions and an overview of the state's revenue outlook. The guidelines do not establish constraints on agency budget requests. Capital budget requests are developed in even-numbered years by state agencies.

The base for agency budget requests is the current year appropriation level. Agencies are responsible for identifying one-time items that are to be deleted, reallocations within base, and new requests. New requests are budgeted incrementally above the base. The requests are due on October 1 to the Budget and Planning Office. The Executive budget is delivered by the third week in January to the Legislature. The Legislature's House Budget Committee assigns portions of the budget to five different appropriations committees for review and revision. The committees provide recommendations to the Budget Committee in early March for action. The House passes its budget by the third week in March and forwards the bill to the Senate. Senate action is typically complete by the third week in April. In odd-numbered years, the Governor and Legislature act on about 16 appropriations bills. The number increases to 19 during evennumbered years because of the addition of capital budget bills.

Missouri conducted a study of its prior budget system in 1997 and determined that an integrated solution, including financial, human resource, and payroll systems, was appropriate for the state. This led to the development of an RFP by the state for these systems. The state did review what other states were doing in this area, but did not identify any examples of the type of integrated solution that Missouri was pursuing. Business requirements for the new systems were developed by a steering coming that included representatives of the Executive, Legislative, and Judicial branches. Following the RFP process, AMS was selected as the vendor for the project. AMS offered two budget solutions to the state. The first, the AMS budget module, was determined to be inadequate based on the state's needs. The second solution, BRASS, was selected for implementation. The actual implementation process took about 12 months for BRASS, and it went live in July 1999. The AMS financial system module also went live at that time. The human resource and payroll modules are scheduled for implementation between July 2000 and February 2001. All Executive, Legislative, and Judicial budget requests are developed using BRASS. The system is mandatory.

The system provides a windows-based interface, easy data entry, and real-time reports. BRASS is designed so that access and ownership of data is transferred from the agencies to the Budget Office to the Legislature during the course of the budget. Read-only access is available to the other participants if it is enabled. The system also includes performance

measures to track the development of the budget. Missouri used these in a limited fashion for the current budget and plans to use them more extensively during the next budget cycle. The system provides limited word processing capabilities for the development of budget narratives. BRASS also supports the development of agency budget requests. The system can be configured to allow for the multiple layers of review and approval within agencies before the requests are transferred to the Budget Office. Missouri worked with AMS to minimize the amount of customization done to BRASS and the financial systems during implementation. This is expected to allow for easier upgrading in the future.

Missouri's prior budget system was a mainframe legacy system characterized as working but difficult to use. Report requests had to be submitted for batch processing. Legislative staff did not use the system and had to rekey information into spreadsheets. In selecting BRASS, the state expected to reduce the non-value added activities of staff, such as rekeying data and developing reports, and to increase the time spent by staff on analysis and development of alternatives and recommendations. After using the system to support the agency and executive development of budget requests for the current year, the expected benefits are being realized. Data entry is much easier, printing and quality assurance have improved, and reports are developed without the need to rekey information. File maintenance activities are significantly improved. The state has reduced overtime for budget staff and has increased the amount of time spent on analysis activities.

Montana

The budget process in Montana begins in January – February of even-numbered years. The first stage is the Executive Planning Process (EPP). During this stage, state agencies develop possible budget items for review by budget analysts and the Governor. These items are developed at a high level for the initial review. The Governor approves items from these requests for further detailed development by agencies. The approved items are loaded into the state's budget system (MBARS) and agencies concentrate their work on the approved items.

Agency budget requests are classified as either base adjustments or new requests in Montana. The base adjustments are related to personnel services (salary and benefits), inflationary adjustments, and fixed cost adjustments. Agencies are given limits on the amount of funding that can be requested to cover all increases. Within this amount the agencies propose base adjustments and new requests.

Actual expenditure information, used as the starting point for agency budgets, is provided in August of even-numbered years. The state uses a staggered schedule for submission of budget requests to the Executive, with most requests due around September 15. The Executive Budget is due to the Legislature by November 15.

Montana initiated a review of its core information systems (budget, human resources, and general ledger) in the mid 1990s and issued an RFP to replace the systems. As a result of the RFP, PeopleSoft was selected for the human resource and general ledger systems and a custom development by Legacy Solutions was selected for the budget system.

MBARS was designed to include information on actual expenditures, agency budget requests, Executive budget requests, Legislative budget actions, final budget authorization, revenues and fund balances for the current biennium and projections into the first year of the next biennium. The system implementation began in January 1998 and the first two modules went live in April 1998. These were the EPP and Capital Budget modules. The entire system was completed in August 1998 and de-budging was finished in September 1998.

All budget requests are developed in MBARS and the system tracks items through the budget cycle. The system allows individual budget items to be "flagged" as either "on" or "off." Items that are "on" have been approved as increases to the base. Items that are "off" have not been approved.

The system is structured to transfer the ownership of data during the budget process from agencies to the Executive to the Legislature. MBARS allows read-only access to the data during each stage if the data-owner enables this feature. For example, this allows executive and legislative analysts to view agency budget requests during the development of agency requests. Similar access is provided during the Executive and Legislative stages.

MBARS includes a number of business rules that are enforced during the budgeting process. This is seen as a major improvement from the prior system. The system's rules include designation of items approved in the Executive Planning Process and rules identifying what budget lines may be modified at certain stages of the process and how modifications must be coded. For example, MBARS enforces the classification of budget requests that are for personnel services, inflation, or fixed costs. The system prevents updating certain fields for requests coded in these categories.

During the 1998 budget cycle, MBARS interfaced with the existing legacy systems for human resources and the general ledger. The new PeopleSoft modules for human resources and general ledger went live in July 1999 and MBARS is now integrated with them for the next budget cycle. MBARS will import data from these systems and automatically establish base requests for personnel services and inflation. Agencies will then be able to request changes to these amounts. MBARS will export data to these systems following passage of the budget.

MBARS has reduced the workload during the budget process for agencies, the Executive, and the Legislature. This is viewed as a major benefit. Under the previous system, workload was an issue for all three groups, especially in the Legislature. MBARS use of flagging for budget requests is seen as a major reason for the workload reduction. In addition, MBARS automates the preparation of budget books for the Executive and Legislative Branches. MBARS contains all the data required for the books and associated templates to produce the first draft of budget books. This is available for the Executive (one budget book per cycle) and the Legislature (12 budget books per cycle).

Alternative Budget System Information and Data Measures

The core data and information needs of participants in the budget process were discussed and reviewed as part of this project. Participants discussed the data and information that is currently used and how that data and information is transmitted through the process.

The primary issues regarding data and information, which are discussed under the advantages and limitations section in this report, relate to the difficulty expressed by all participants in accessing the data and information. The B-System, state agency systems, Wismart and other information systems appear to contain the core data and information required. No data or information was systematically identified that is not contained in these systems. However, concerns were expressed that the data and information is not easily available to all participants, it is not available electronically, it is not available in a standard format, or it is not available in a timely fashion.

The examples provided to support statements regarding the difficulties with access to data and information ranged from standard forms and documents (such as the paper B-9 worksheets) to specialized documents (such as worksheets with program specific spending projections). The examples reflect that some standards and processes are not consistently followed and that some standards and processes have not been established. The information system modifications identified in the report may address some of these issues, depending on the form that the solution takes when implemented.

The use of performance measures was identified at the start of the review as one particular area of interest with respect to data and information measures. Two state agencies (TEACH Wisconsin and the Department of Transportation) were required to use performance based budgeting in the development of their 1999-01 budget requests. Information was included in the state's budget instructions on performance based budgeting and performance-based measures.

The budget instructions identify two areas in which information is required for performance based budgeting. These are

- 1. The key goals, activities and objectives for each program
- 2. The outcome measure(s) selected for the program, including a five-year history of outcomes and the planned improvement in outcomes over the next five years

Cost and Timeline Estimates

The cost and timeline estimates provided in this review are based on the high-level review of current processes and systems. In addition, the estimates reflect past experiences of Arthur Andersen and the states surveyed in the project. It must be noted that the actual costs and timelines experienced by the state to implement any of the modifications identified in this report could differ significantly from the estimates in the report because of decisions made during the planning and implementation.

+50% +30% +20% +10% Time -50% -30% -20% -10% Info Systems Requirements Design Installation Plan Definition/Selection

Cost Estimates and Information Systems Projects

The above graphic illustrates how cost and timeline estimates converge during the period from the development of an information systems plan to the installation of a system. The estimates will vary depending on if they are developed based on high-level information or from detailed, bottom-up workplans. The estimates in this report are based on high-level information and this may increase the variation between estimates and actual costs. This report presents estimates based on pre-Information Systems Plan activities, which is at the left side of the graphic above.

Many factors will affect the actual cost, effort and time required to implement projects. These factors include:

- Actual scope and complexity of the project, such as
 - the number of interfaces developed
 - the number of modifications made to a package solution
 - the number of data conversions required to implement
- Actual features delivered by various software products
- Amount of turnover experienced on each team for longer implementations
- Degree of process variation experienced as solutions are rolled out to each participant
- Degree of regression testing required to ensure packages work together as well as with existing systems
- Skill and experience in project management
- Number of concurrent implementation and need for program management
- Skill level of personnel assigned to each project and individual learning curves
- Number of full-time vs. part-time resources committed to the project

- Degree of sponsorship, ownership and clear business case used to guide each implementation
- Degree of change enablement required
- Number of third party specialists used
- · Actual technical architecture and complexity

Comments on the PMIS System

The PMIS system, as noted in this report, was not a focus system for the review. However, during the course of the review, information was collected on the system that is worth noting. The status of the system may be an issue for further review by the state. The following is information regarding the PMIS system:

- PMIS system is the position control system.
- It was developed between 1973 and 1974. It represents very old technology and infrastructure that has received very little attention from a technical upgrade perspective.
- Not all agencies comply with data standards and information required to sufficiently run the PMIS system. This may result in bad data and raises data-integrity issues.
- No architecture upgrades have occurred since the 1970's.
- It appears to be a stable system able to continue processing into the future. Currently ½ FTE is dedicated to maintenance.
- It has no on-line query ability to obtain data. All data requirements/reports/ queries
 required by users are major IS initiatives to integrate data and develop batch programs
 to obtain the data.
- PMIS is structured off the WISMART accounting structure. The SBO uses a different budgeting accounting structure and therefore data entry and data manipulation is required to make the PMIS data useful for budgeting.
- PMIS data structures consist of disparate tables. Department of Administration information technology staff is often asked to spend time integrating the disparate databases for reporting and query requests. This requires more manual data manipulation and maintenance.

Glossary

- B-System The B-System is the primary information system for the development of the appropriation component (Chapter 20) in the Executive and Legislative budget bills. The B-system is composed of B-Forms defined below.
- B-1 (PMIS) Listing of existing base-year positions by program, subprogram and element for agencies on PMIS.
- B-2 (Budget Analysis Form) The basic form for preparation and analysis of agency budget requests.
- B-3 (Revenue and Balances Form) The form used to itemize actual and estimated revenues received by a department, as well as expenditures financed by such revenues.
- B-5 (Program Structure File Maintenance Input Form) The form used to file maintenance the permanent program structure that exists in the State Budget Office (SBO) computer files.
- B-6 (Appropriation Structure File Maintenance Input Form) The form used to file
 maintenance the permanent appropriation structure that exists in the SBO computer
 files.
- B-7 (Department Summary Form) The form used to provide annual and biennial summaries of agency budget requests.
- B-8 (Program Summary Form) The form used to provide annual and biennial summaries of an agency's budget at the program level.
- B-9 (Base-Year Reconciliation Form) The form used to compile the adjusted base-year figures for an agency's budget request.
- B-10 (Position Changes and Salary Worksheet) The form used to identify the cost of salary changes to the adjusted base level.
- Briefing System This is a computer application used by the SBO to support the development of the Governor's budget bill.
- Business Case A business case is an analysis of the impact of implementing changes (e.g., a new information system) on a business activity.
- Document Management A way for users to organize data, distribute documents and manage the flow of information among users or across organizations. It defines who has access to specific information and determines how data can be viewed.
- Data Structure The rules for naming and creating data elements within and/or across applications. The structure can include the number of characters in a data element, alphabetical or numeric structure, and number of decimal places.
- Data Warehouse A data warehouse is a separate "information system" environment which accumulates disparate system data for purposes of integration, consolidation and efficient reporting.
- Information Systems Plan An information systems plan provides direction for the use
 of information technology in support of business needs. The planning process includes
 detailed analysis of the business needs for a set of activities and an assessment of the
 hardware and software requirements needed to support those business needs.

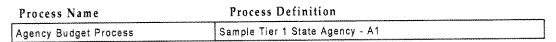
- Integration The electronic sharing of data across different information systems is
 described as integration. Integration between systems can range from fully integrated
 (where systems easily share information electronically) to non-integrated (where
 systems are separate from one another and do not share information electronically).
- Wismart The Wismart system is the primary information system for execution and processing of operational budgets.
- PMIS The Personnel Management Information System is the primary information system for the management of personnel positions within state agencies. The PMIS system is used to reconcile positions within the budgeting process.
- Payroll The payroll is the source for actual expenditure information related to individual employee salaries.

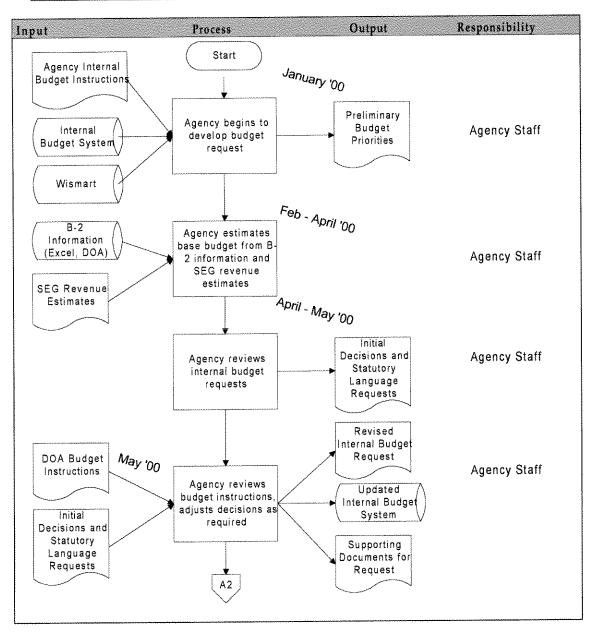
Key to Reading Process Flow Symbols

A2	This is an "off page connector." It directs the reader to another point the process on a different page. The letter references corresponding letter on another page; the number references the So, A2 directs the reader to off page connector A on page
	This symbol indicates a form as the input or output of a
	This symbol indicates a process
	This symbol indicates a start or stop (termination point) in a
	This symbol indicates a database as the input or output of a

State Agency Budget Process Documentation

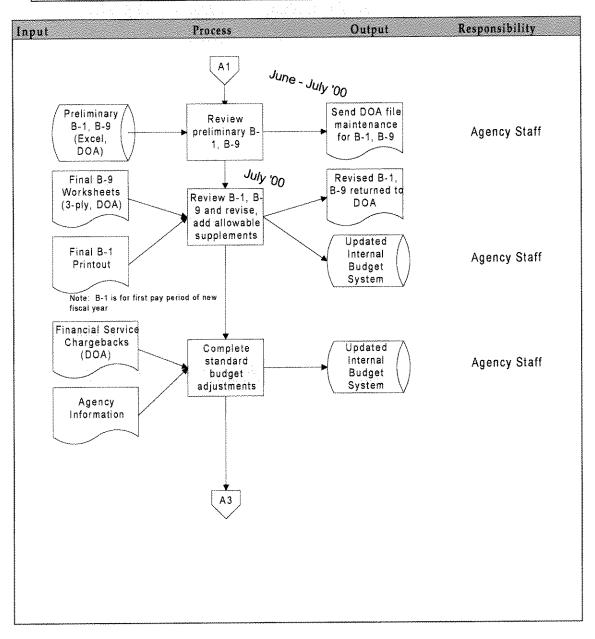
The following process maps summarize the development of budget requests by state agencies. A sample map is provided for a Tier 1 and Tier 2 agency. The maps depict representative activities in each type of agency. The specific process steps and timeline for individual agencies will differ from these samples.



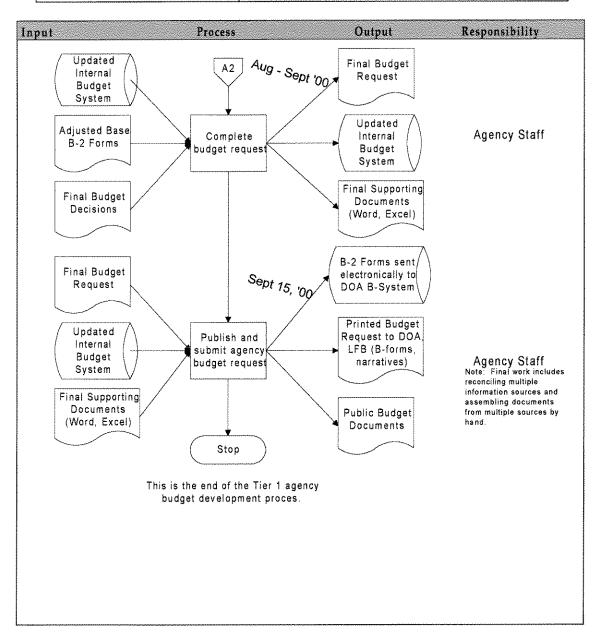


Process Name Process Definition

Agency Budget Process Sample Tier 1 State Agency - A2

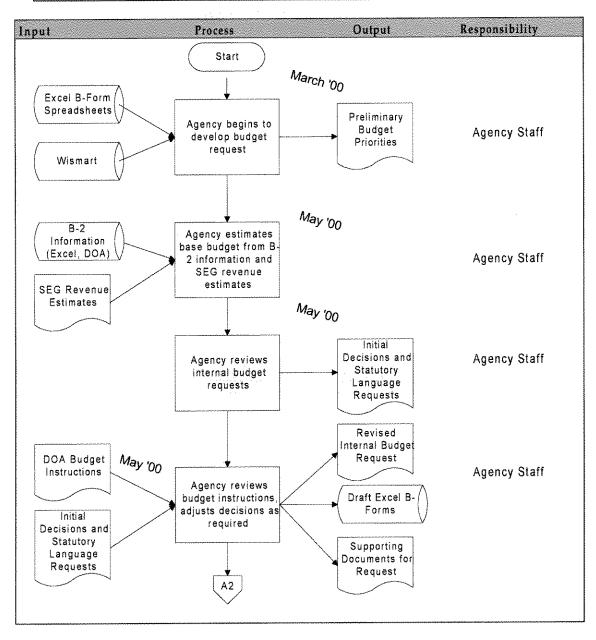


Process Name	Process Definition
Agency Budget Process	Sample Tier 1 State Agency - A3



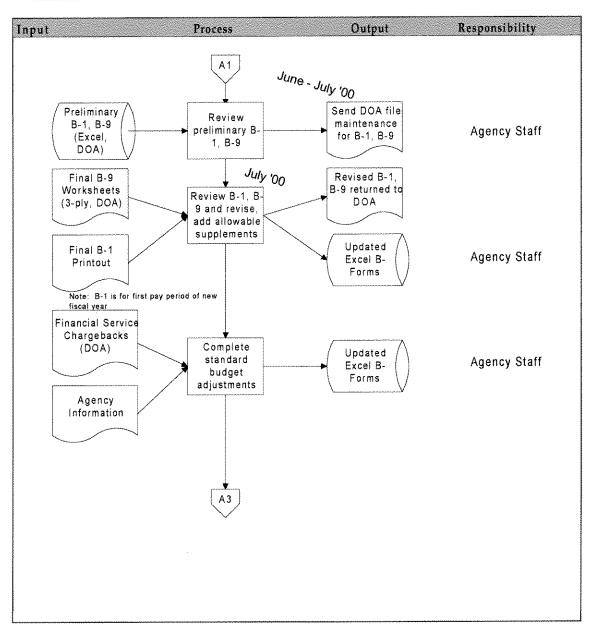
Process Name Process Definition

Agency Budget Process Sample Tier 2 State Agency - A1

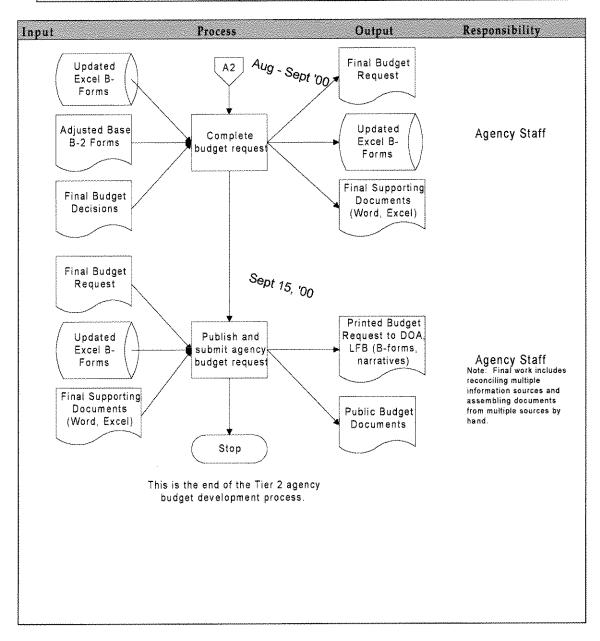


 Process Name
 Process Definition

 Agency Budget Process
 Sample Tier 2 State Agency - A2



Process Name	Process Definition
Agency Budget Process	Sample Tier 2 State Agency - A3



State Budget Office Process Documentation

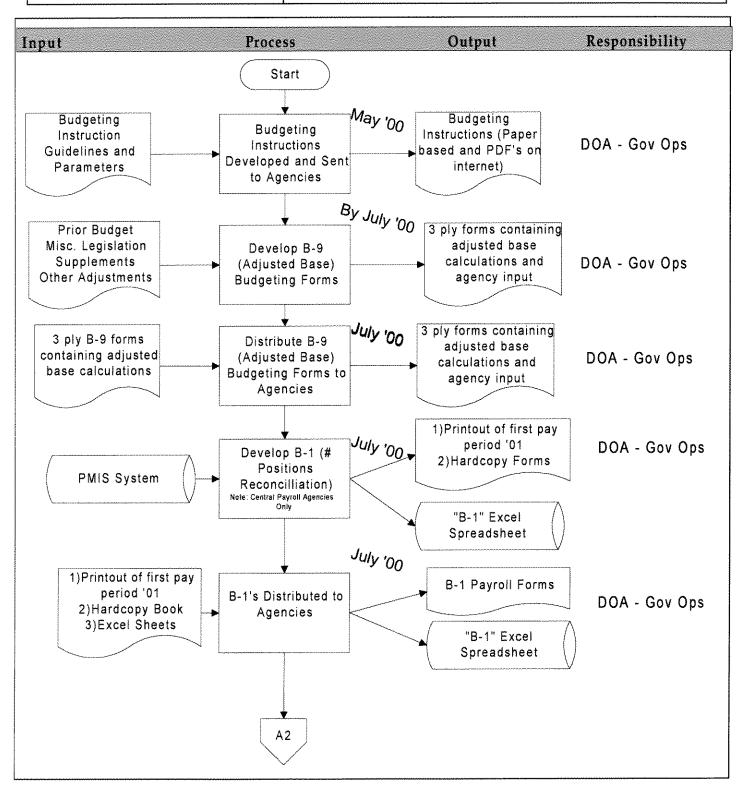
The following process maps summarize the State Budget Office's processes during the budget development process. The maps reflect information collected from SBO staff during the course of the project.

Process Name

Process Definition

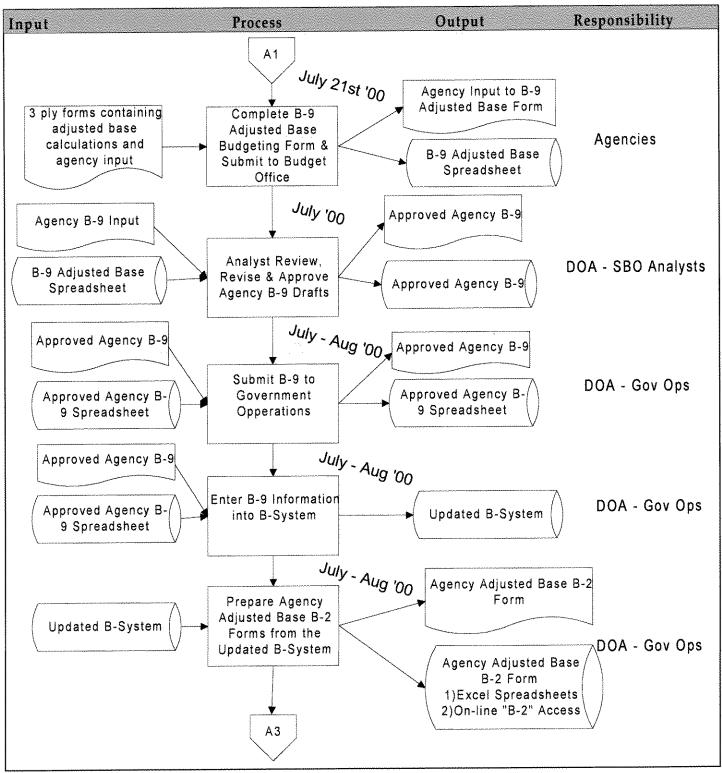
SBO Budget Process

Submittal of Agency Budget Requests - A1



Process Name Process Definition

SBO Budget Process Submittal of Agency Budget Requests - A2

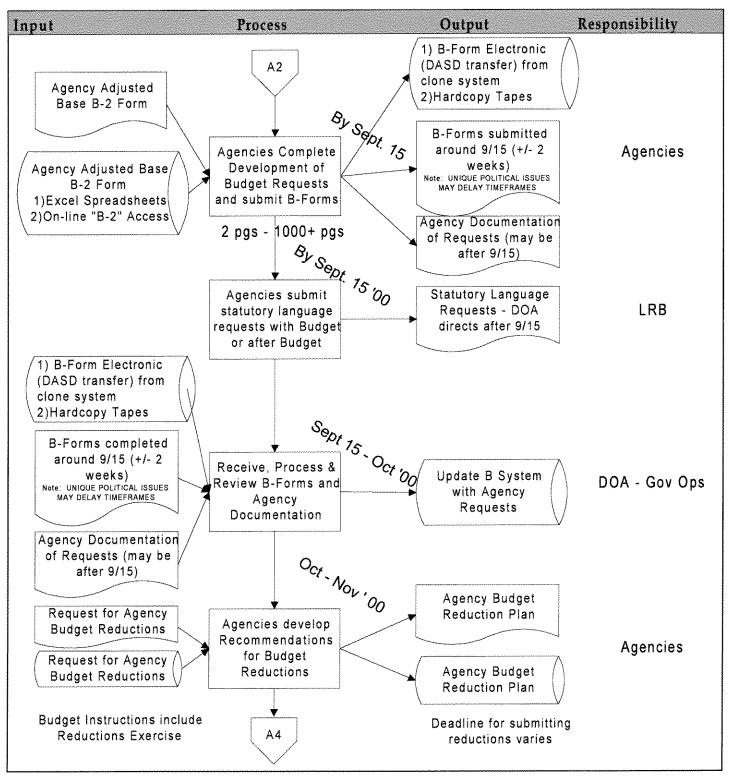


Process Name

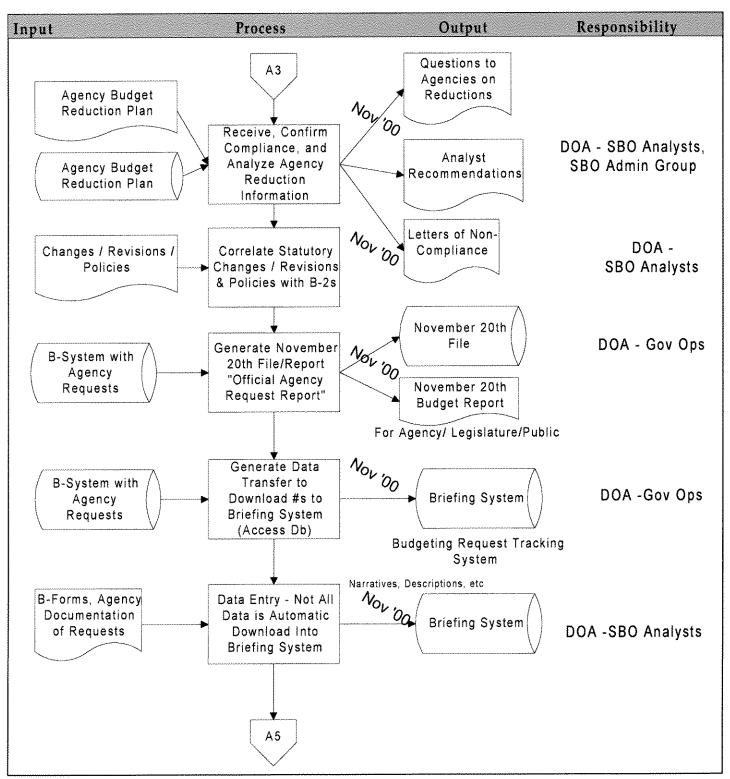
Process Definition

SBO Budget Process

Submittal of Agency Budget Requests - A-3

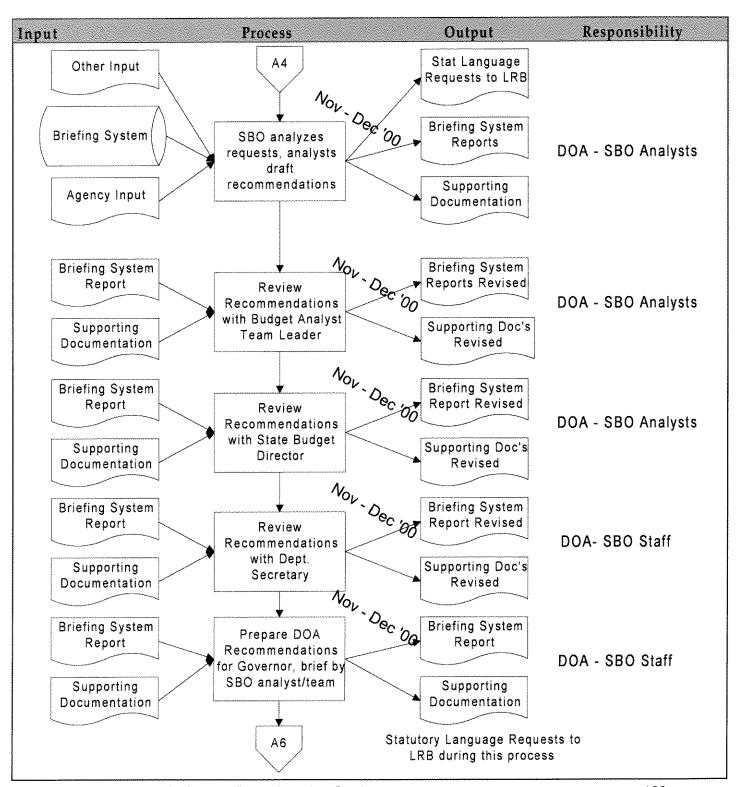


Process NameProcess DefinitionSBO Budget ProcessSubmittal of Agency Budget Requests A-4



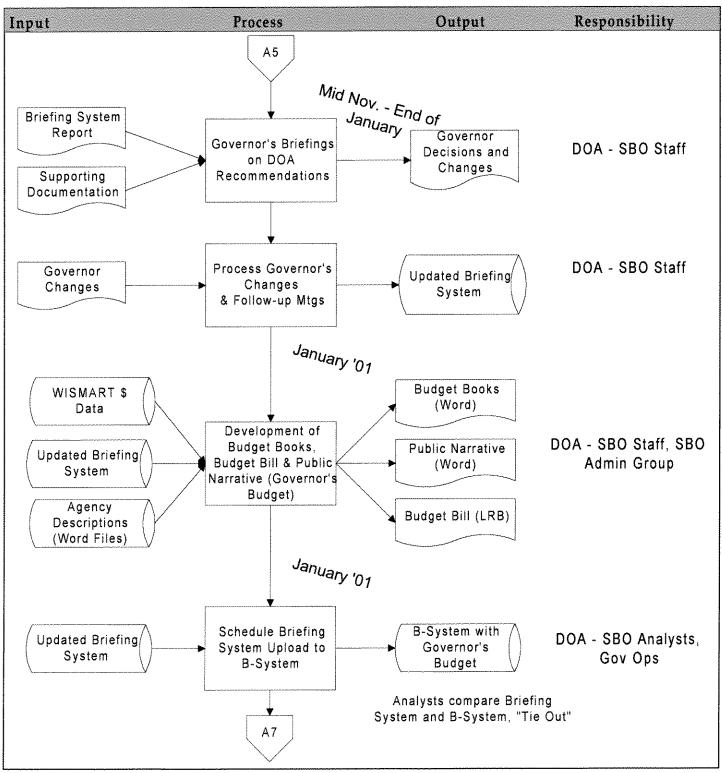
 Process Name
 Process Definition

 SBO Budget Process
 Preparation of Governor's Budget - A5



 Process Name
 Process Definition

 SBO Budget Process
 Preparation of Governor's Budget - A6

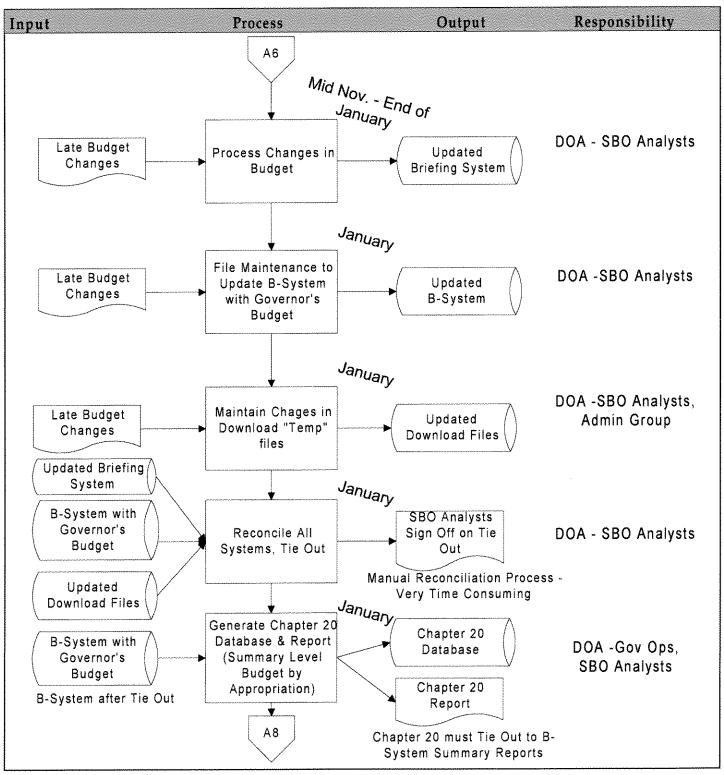


Process Name

Process Definition

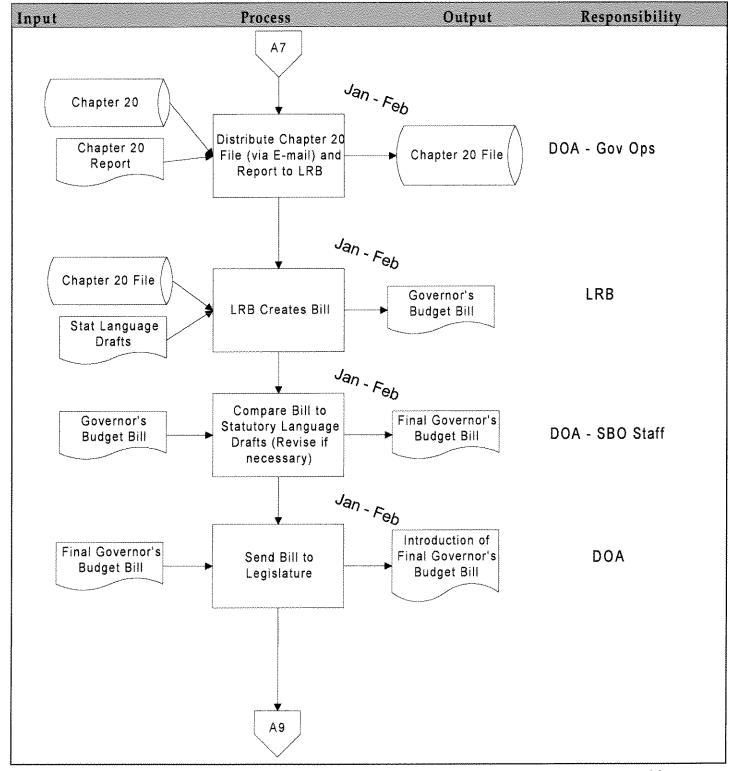
SBO Budget Process

Preparation of Governor's Budget A-7



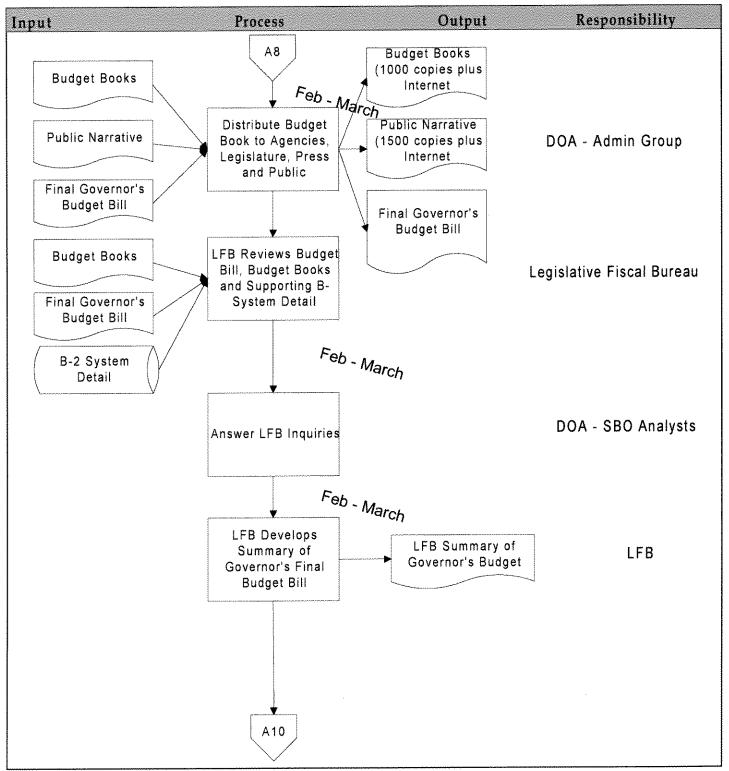
 Process Name
 Process Definition

 SBO Budget Process
 Preparation of Governor's Budget - A8



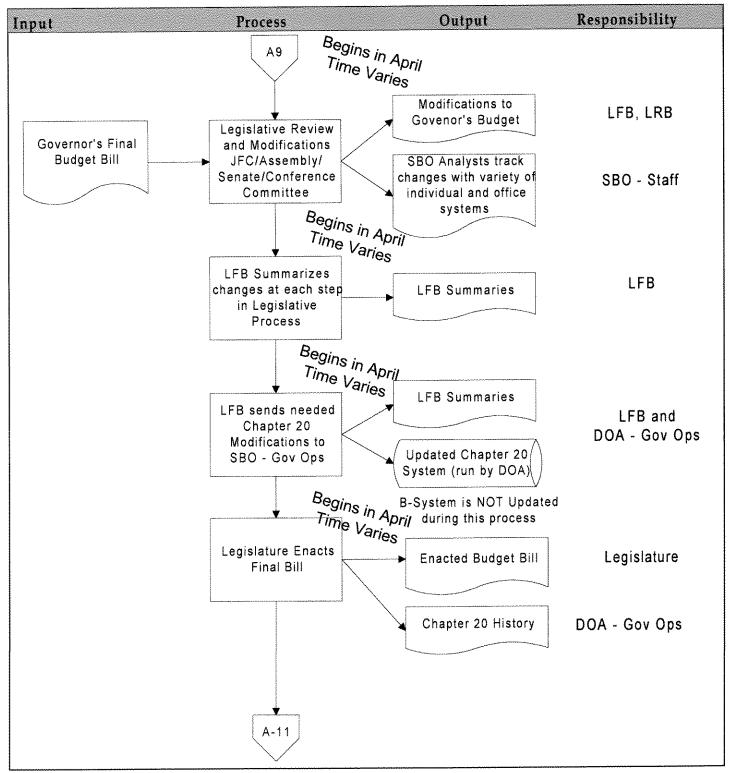
 Process Name
 Process Definition

 SBO Budget Process
 Legislative Budget - A-9



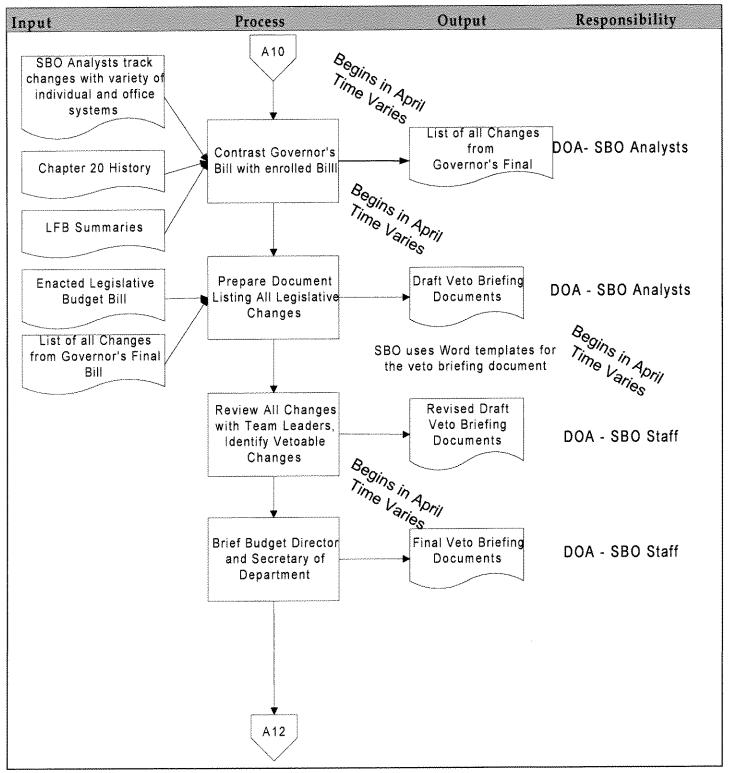
 Process Name
 Process Definition

 SBO Budget Process
 Legislative Budget - A10



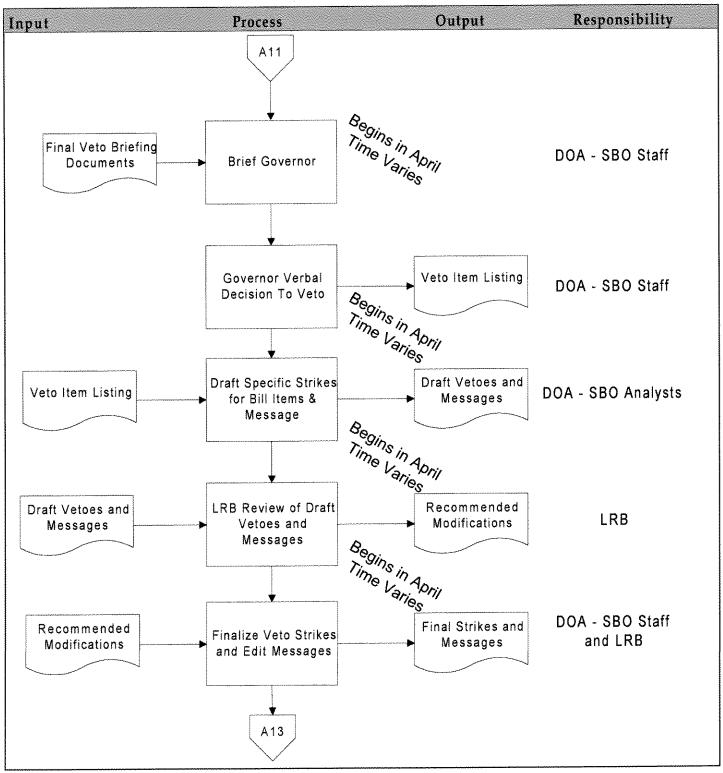
Process Name Process Definition

SBO Budget Process Governor's Vetoes - A11



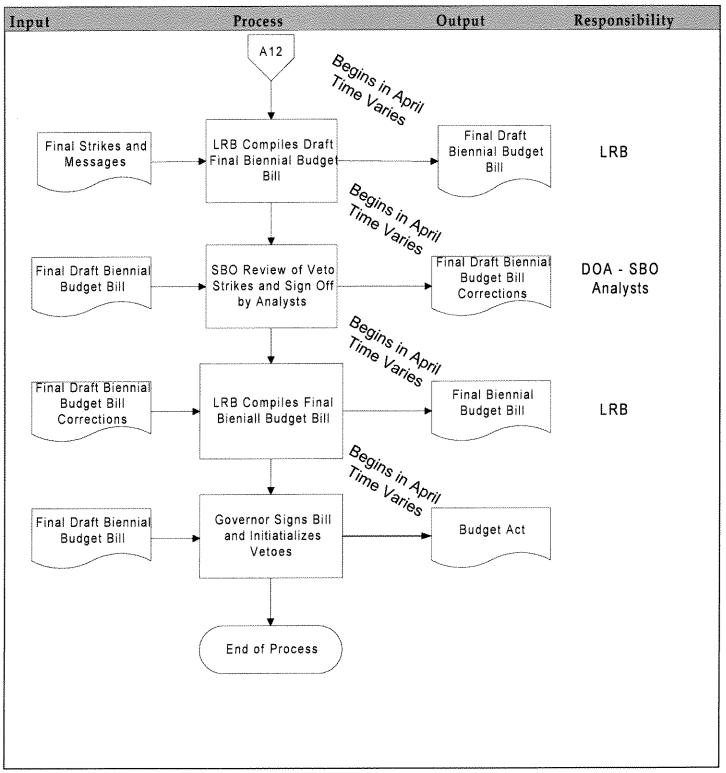
 Process Name
 Process Definition

 SBO Budget Process
 Governor's Vetoes - A-12



 Process Name
 Process Definition

 SBO Budget Process
 Governor's Vetoes - A13



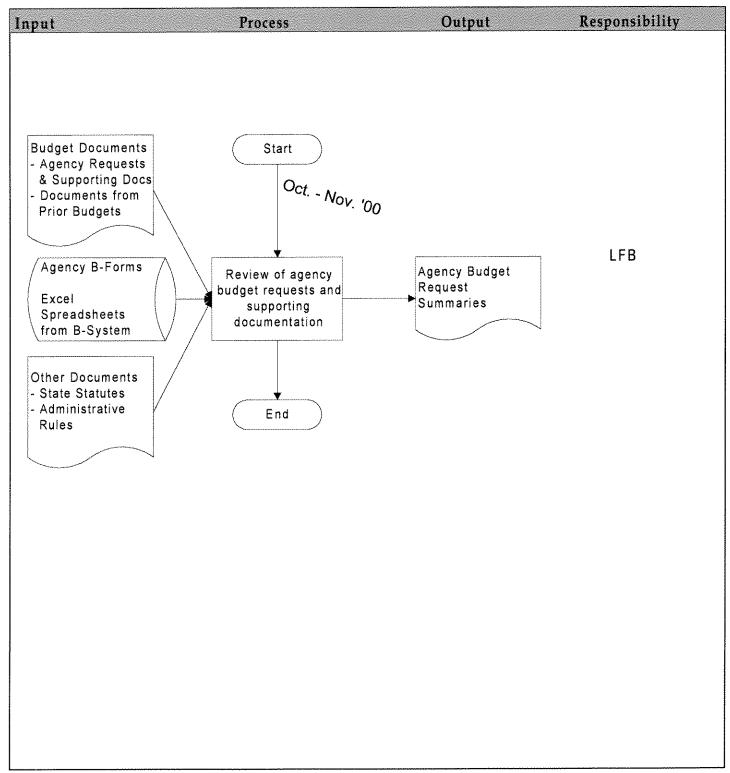
Legislative Fiscal Bureau Process Documentation

The following process maps summarize the Legislative Fiscal Bureau's processes during the budget development process. The maps reflect information collected from LFB staff during the course of the project.

Process Name

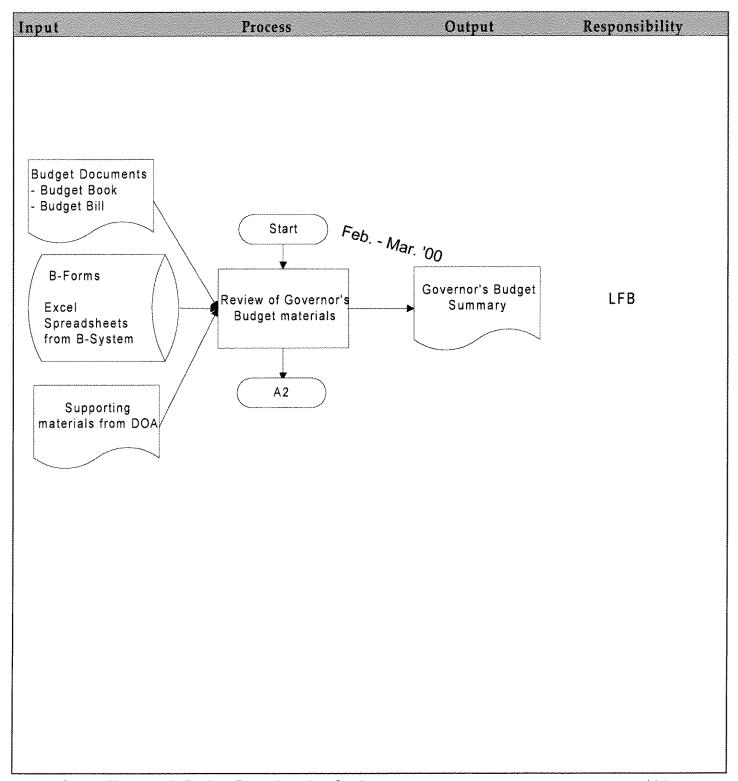
Process Definition

LFB Budget Process Summary of Agency Budget Requests



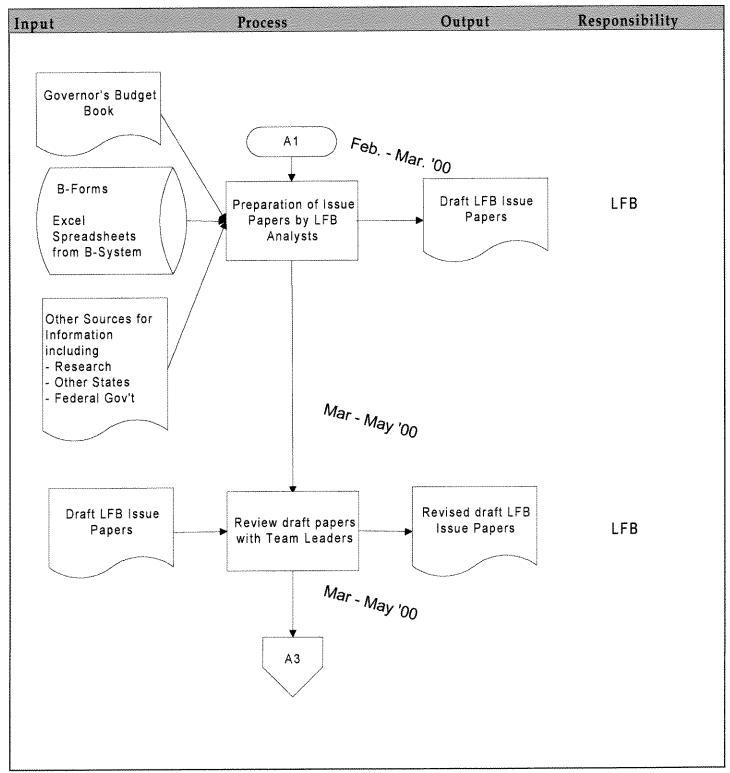
Process Name Process Definition

LFB Budget Process Summary of Governor's Budget - A1



 Process Name
 Process Definition

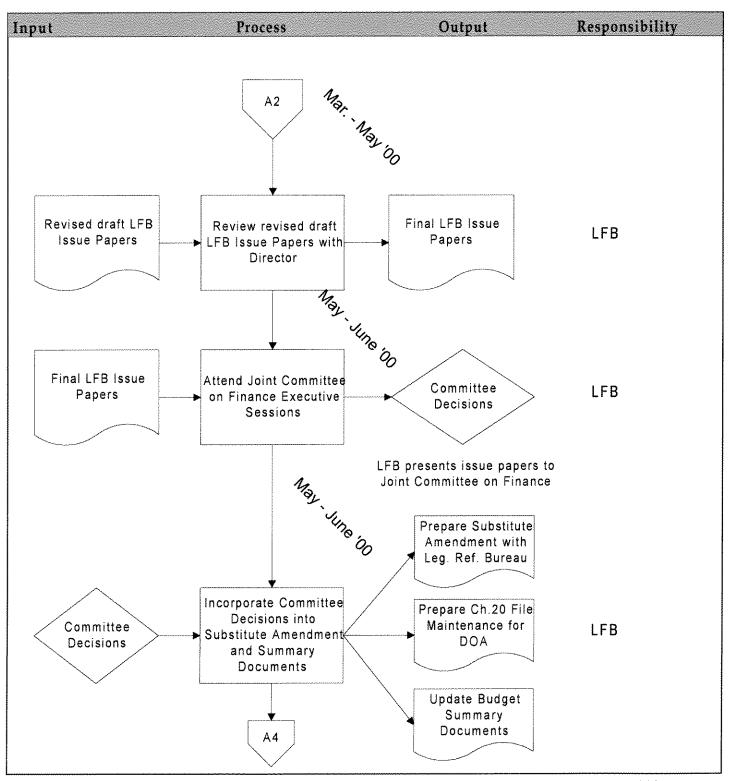
 LFB Budget Process
 JFC Budget - A2



Process Name

Process Definition

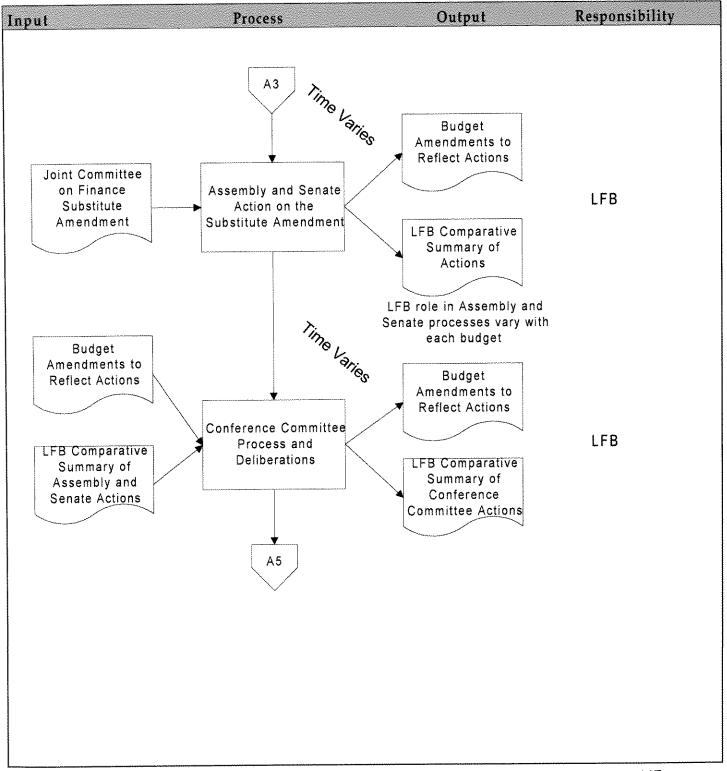
LFB Budget Process	JFC Budget - A3



Process Name

Process Definition

LFB Budget Process	Legislative Budget - A4



Process Flow

Process Name Process Definition

LFB Budget Process Legislative Budget - A5

